

## **Day 1: Kubernetes Course (Dell)**

### **General Kubernetes Commands**

kubectl: Command line utility for running Kubernetes commands.

kubectl api-versions: Lists available API versions.

kubectl api-resources: Lists available resources.

kubectl create -f <file.yaml>: Create resources defined in the YAML file.

kubectl get pods: List all pods in the current namespace.

kubectl describe pod <pod-name>: Describe a specific pod.

kubectl delete pod <pod-name>: Delete a specific pod.

kubectl run <name-of-pod> --image=<name-of-image>: Run a pod imperatively.

kubectl get pod <pod-name> -o yaml > <pod-name>.yaml: Get the YAML output of a pod.

### **ReplicaSet Commands**

kubectl create -f replicaset-1.yaml: Create a ReplicaSet from a YAML file.

kubectl get replicaset: Get all ReplicaSets in the current namespace.

kubectl describe replicaset <replicaset-name>: Describe a specific ReplicaSet.

kubectl scale replicaset <replicaset-name> --replicas=<number>: Scale a ReplicaSet imperatively.

### **Deployment Commands**

kubectl create deployment <deployment-name> --image=<image-name>: Create a deployment.

kubectl scale deployment <deployment-name> --replicas=<number>: Scale a deployment.

kubectl get deployments: Get all deployments in the current namespace.

kubectl describe deployment <deployment-name>: Describe a specific deployment.

kubectl edit deployment <deployment-name>: Edit a deployment.

kubectl set image deployment <deployment-name> <container-name>=<new-image>: Update the image of a deployment.

kubectl rollout status deployment <deployment-name>: Check the rollout status of a deployment.

kubectl rollout undo deployment <deployment-name>: Roll back a deployment.

kubectl rollout history deployment <deployment-name>: View the rollout history of a deployment.

kubectl rollout pause deployment <deployment-name>: Pause a deployment.

kubectl rollout resume deployment <deployment-name>: Resume a paused deployment.

### **Service Commands**

kubectl create -f my-service.yaml: Create a service from a YAML file.

kubectl get service <service-name>: Get details of a specific service.

kubectl get endpoint: Get the endpoints of the services.

kubectl expose pod <pod-name> --name=<service-name> --port=<port-number>: Expose a pod as a service imperatively.

## **Day 2: Kubernetes Course (Dell)**

### **Namespace Commands**

kubectl get namespace: List all namespaces.

kubectl get all --all-namespaces: List all resources in all namespaces.

kubectl create namespace <namespace-name>: Create a new namespace.

kubectl create -f namespace.yaml: Create a namespace from a YAML file.

kubectl delete namespace <namespace-name>: Delete a namespace.

kubectl run <pod-name> --image=nginx --namespace=<namespace>: Run a pod in a specific namespace.

kubectl get pods --namespace=<namespace>: List all pods in a specific namespace.

#### Resource Quota Commands

kubectl create -f resourcequota.yaml: Create a resource quota from a YAML file.

kubectl describe quota --namespace=<namespace>: Describe the resource quota of a namespace.

#### Environment Variables and ConfigMaps Commands

kubectl create -f configmap.yaml: Create a ConfigMap from a YAML file.

kubectl create configmap <configmap-name> --from-literal=<key>=<value>: Create a ConfigMap with a key-value pair.

kubectl describe configmap <configmap-name>: Describe a specific ConfigMap.

kubectl create configmap <configmap-name> --from-file=<file-path>: Create a ConfigMap from a file.

#### Secrets Commands

echo -n '<value>' | base64: Encode a value to base64.

echo '<encoded-value>' | base64 --decode: Decode a base64 value.

kubectl describe secret <secret-name>: Describe a specific secret.

kubectl get secret <secret-name> -o yaml: Get the YAML output of a secret.

kubectl create secret generic <secret-name> --from-literal=<key>=<value>: Create a secret with a key-value pair.

kubectl create secret generic <secret-name> --from-file=<file-path>: Create a secret from a file.

#### Persistent Volume Commands

kubectl create -f <pv.yaml>: Create a persistent volume from a YAML file.

kubectl create -f <pvc.yaml>: Create a persistent volume claim from a YAML file.

kubectl get pv: Get all persistent volumes.

kubectl get pvc: Get all persistent volume claims.

kubectl describe pv <pv-name>: Describe a specific persistent volume.

kubectl describe pvc <pvc-name>: Describe a specific persistent volume claim.

kubectl delete pvc <pvc-name>: Delete a persistent volume claim.